

BACKFILE DOCUMENT INDEX SHEET



A DOCPHOENIX

APPL PARTS



371P	PCT Papers in a 371 Application
A...	Amendment Including Elections
ABST	Abstract
ADS	Application Data Sheet
AF/D	Affidavit or Exhibit Received
APPENDIX	Appendix
ARTIFACT	Artifact
BIB	Bib Data Sheet
CLM	Claim
COMPUTER	Computer Program Listing
CRFL	All CRF Papers for Backfile
DIST	Terminal Disclaimer Filed
DRW	Drawings
FOR	Foreign Reference
FRPR	Foreign Priority Papers
IDS	IDS Including 1449

NPL	Non-Patent Literature
OATH	Oath or Declaration
PET.	Petition
RETRN	Mail Returned by USPS
SEQLIST	Sequence Listing
SPEC	Specification
SPEC NO	Specification Not in English
TRNA	Transmittal New Application
CTNF	Count Non-Final
CTRS	Count Restriction
EXIN	Examiner Interview
M903	DO/EO Acceptance
M905	DO/EO Missing Requirement
NFDR	Formal Drawing Required
NOA	Notice of Allowance
PETDEC	Petition Decision

OUTGOING

CTMS	Misc. Office Action
1449	Signed 1449
892	892
ABN	Abandonment
APDEC	Board of Appeals Decision
APEA	Examiner Answer
CTAV	Count Advisory Action
CTEQ	Count Ex parte Quayle
CTFR	Count Final Rejection

INCOMING

AP.B	Appeal Brief
C.AD	Change of Address
N/AP	Notice of Appeal
PA..	Change in Power of Attorney
REM	15/03/02 REM 9 Applicant Remarks in Amendment
XT/	Extension of Time filed separate

File Wrapper

FWCLM	File Wrapper Claim
IIFW	File Wrapper Issue Information
SRFW	File Wrapper Search Info

Internal

SRNT	Examiner Search Notes
CLMPTO	PTO Prepared Complete Claim Set

6/26/03

ECBOX	Evidence Copy Box Identification
WCLM	Claim Worksheet
WFEE	Fee Worksheet

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a rejected base claim and were said to be allowable if rewritten in independent form including all the limitations of the base claims and any intervening claims. Applicants respectfully submit that rewriting these claims is not required in view of the amendments set forth herein to the claims from which claims 2, 3 and 5-9 depend.

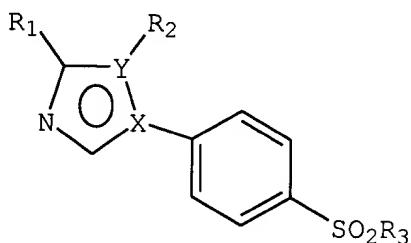
Applicants respectfully submit that in view of the foregoing amendments, all of the pending claims are in condition for allowance. A notice to that effect is solicited.

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Attachment: Marked up copy of amendments

Marked Up Copy of Amended Claims:

1. (Amended) A compound of formula I:



I

wherein:

one of X or Y represents N and the other represents C;

R₁ represents hydrogen, methyl, halogen, cyano, nitro, -CHO, -COCH₃ or -COOR₄;

R₂ represents aryl or heteroaryl ~~optionally unsubstituted or~~ substituted with one or more groups independently selected from halogen, C₁₋₈ alkyl, C₁₋₈ haloalkyl, R₄OC₀₋₈ alkyl, R₄SC₀₋₈ alkyl, cyano, nitro, -NR₄R₆, -NR₄SO₂R₅, -SOR₅, -SO₂R₅, -SO₂NR₄R₆, or -CONR₄R₆;

R₃ represents C₁₋₈ alkyl, C₁₋₈ haloalkyl or -NR₄R₆;

R₄ represents hydrogen, C₁₋₈ alkyl, or arylC₀₋₈ alkyl (where the aryl group can be ~~optionally unsubstituted or~~ substituted with one or more groups selected from C₁₋₈ alkyl, halogen, C₁₋₈ haloalkyl, cyano, nitro, R₇OC₀₋₈ alkyl, R₇SC₀₋₈ alkyl, -NR₇R₈, -NR₇COR₅, -COR₇ or -COOR₇);

R₅ represents C₁₋₈ alkyl or C₁₋₈ haloalkyl;

R₆ represents hydrogen, C₁₋₈ alkyl, arylC₁₋₈ alkyl (where the aryl group can be ~~optionally unsubstituted or~~ substituted with one or more groups selected from C₁₋₈ alkyl, halogen, C₁₋₈ haloalkyl,

cyano, nitro, R_7OC_{0-8} alkyl, R_7SC_{0-8} alkyl, $-NR_7R_8$, $-NR_7COR_5$, $-COR_7$ or $-COOR_7$, $-COR_8$ or $-COOR_8$;

R_7 represents hydrogen, C_{1-8} alkyl or benzyl;

R_8 represents C_{1-8} alkyl or C_{1-8} haloalkyl;

aryl in the above definitions represents phenyl or naphthyl; and heteroaryl in the above definitions represents pyridine, pyrazine, pyrimidine or pyridazine, which can be optionally fused to a benzene ring;

and ~~the~~ or a salts, solvates or prodrugs thereof.

4. (Amended) A compound according to claim 1 wherein R_2 represents phenyl or pyridine ~~optionally unsubstituted or~~ substituted with one or more groups independently selected from halogen, C_{1-8} alkyl, C_{1-8} haloalkyl, R_4OC_{0-8} alkyl, R_4SC_{0-8} alkyl, cyano, nitro, $-NR_4R_6$, $-NR_4SO_2R_5$, $-SOR_5$, $-SO_2R_5$, $-SO_2NR_4R_6$, or $-CONR_4R_6$.

10. (Amended) A compound according to claim 9 wherein R_2 represents phenyl or pyridine ~~optionally unsubstituted or~~ substituted with one or more groups independently selected from halogen, C_{1-8} alkyl, C_{1-8} haloalkyl, R_4OC_{0-8} alkyl, R_4SC_{0-8} alkyl, cyano, nitro, $-NR_4R_6$, $-NR_4SO_2R_5$, $-SOR_5$, $-SO_2R_5$, $-SO_2NR_4R_6$, or $-CONR_4R_6$.

11. (Amended) A compound according to claim 1 selected from:

5-(4-fluorophenyl)-1-(4-methylsulfonylphenyl)imidazole;

5-(4-methylphenyl)-1-(4-methylsulfonylphenyl)imidazole;

5-(2,4-difluorophenyl)-1-(4-methylsulfonylphenyl)imidazole;

1-(4-methylsulfonylphenyl)-5-phenylimidazole;

5-(3,4-dichlorophenyl)-1-(4-methylsulfonylphenyl)imidazole;.

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5-(4-methoxyphenyl)-1-(4-methylsulfonylphenyl)imidazole;
5-(3-fluoro-4-methoxyphenyl)-1-(4-methylsulfonylphenyl)imidazole;
5-(3-fluorophenyl)-1-(4-methylsulfonylphenyl)imidazole;
5-(3-fluoro-4-methylphenyl)-1-(4-methylsulfonylphenyl)imidazole;
5-(2-fluorophenyl)-1-(4-methylsulfonylphenyl)imidazole;
1-(4-methylsulfonylphenyl)-5-(4-trifluoromethoxyphenyl)imidazole;
5-(6-methyl-3-pyridyl)-1-(4-methylsulfonylphenyl)imidazole;
5-(2-fluoro-4-methoxyphenyl)-1-(4-methylsulfonylphenyl)imidazole;
5-(3-chloro-4-methylphenyl)-1-(4-methylsulfonylphenyl)imidazole;
5-(3-methoxy-4-methylphenyl)-1-(4-methylsulfonylphenyl)imidazole;
5-(4-chlorophenyl)-1-(4-methylsulfonylphenyl)imidazole;
5-(6-chloro-3-pyridyl)-1-(4-methylsulfonylphenyl)imidazole;
5-(2,6-dichloro-3-pyridyl)-1-(4-methylsulfonylphenyl)imidazole;
5-(2-chloro-6-methoxy-3-pyridyl)-1-(4-methylsulfonylphenyl)imidazole;
5-(5,6-dichloro-3-pyridyl)-1-(4-methylsulfonylphenyl)imidazole;
1-(4-methylsulfonylphenyl)-5-(4-propoxypyhenyl)imidazole;
5-(3,5-diethoxyphenyl)-1-(4-methylsulfonylphenyl)imidazole;
5-(4-ethoxyphenyl)-1-(4-methylsulfonylphenyl)imidazole;
1-(4-methylsulfonylphenyl)-5-(4-nitrophenyl)imidazole;
5-(4-methylsulfanylphenyl)-1-(4-methylsulfonylphenyl)imidazole;
5-(4-ethylsulfanylphenyl)-1-(4-methylsulfonylphenyl)imidazole;
5-(4-dimethylaminophenyl)-1-(4-methylsulfonylphenyl)imidazole;
1-(4-fluorophenyl)-5-(4-methylsulfonylphenyl)imidazole;
5-(4-fluorophenyl)-4-methyl-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-5-(4-fluorophenyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-5-(4-methylphenyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-5-(2,4-difluorophenyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-1-(4-methylsulfonylphenyl)-5-phenylimidazole;

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4-chloro-5-(3,4-dichlorophenyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-5-(4-methoxyphenyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-5-(3-fluoro-4-methoxyphenyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-5-(3-fluorophenyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-5-(3-fluoro-4-methylphenyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-5-(2-fluorophenyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-1-(4-methylsulfonylphenyl)-5-(4-trifluoromethoxyphenyl)imidazole;
4-chloro-5-(6-methyl-3-pyridyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-5-(2-fluoro-4-methoxyphenyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-5-(3-chloro-4-methylphenyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-5-(3-methoxy-4-methylphenyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-5-(4-chlorophenyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-5-(6-chloro-3-pyridyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-5-(2,6-dichloro-3-pyridyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-5-(2-chloro-6-methoxy-3-pyridyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-5-(5,6-dichloro-3-pyridyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-1-(4-methylsulfonylphenyl)-5-(4-propoxyphenyl)imidazole;
4-chloro-5-(3,5-diethoxyphenyl)-1-(4-methylsulfonylphenyl)imidazole;

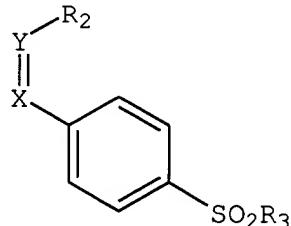
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4-chloro-5-(4-ethoxyphenyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-1-(4-methylsulfonylphenyl)-5-(4-nitrophenyl)imidazole;
4-chloro-5-(4-methylsulfanylphenyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-5-(4-ethylsulfanylphenyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-5-(6-ethoxy-3-pyridyl)-1-(4-methylsulfonylphenyl)imidazole;
4-bromo-5-(4-fluorophenyl)-1-(4-methylsulfonylphenyl)imidazole;
1-(4-fluorophenyl)-2-methyl-5-(4-methylsulfonylphenyl)imidazole;
2-chloro-1-(4-fluorophenyl)-5-(4-methylsulfonylphenyl)imidazole;
1-(4-fluorophenyl)-5-(4-methylsulfonylphenyl)imidazol-2-carboxaldehyde;
methyl 1-(4-fluorophenyl)-5-(4-methylsulfonylphenyl)imidazol-2-carboxylate;
2-bromo-1-(4-fluorophenyl)-5-(4-methylsulfonylphenyl)imidazole;
1-(4-fluorophenyl)-5-(4-methylsulfonylphenyl)imidazol-2-carbonitrile;
2-chloro-5-(4-methylsulfonylphenyl)-1-phenylimidazole;
2-chloro-1-(4-methylphenyl)-5-(4-methylsulfonylphenyl)imidazole;
4-[4-chloro-5-(4-fluorophenyl)imidazol-1-yl]benzenesulfonamide;
4-(4-chloro-5-phenylimidazol-1-yl)benzenesulfonamide;
4-[4-chloro-5-(3,4-dichlorophenyl)imidazol-1-yl]benzenesulfonamide;
4-[4-chloro-5-(4-methylphenyl)imidazol-1-yl]benzenesulfonamide;
4-[4-chloro-5-(4-ethoxyphenyl)imidazol-1-yl]benzenesulfonamide;
4-[4-chloro-5-(3-fluoro-4-methoxyphenyl)imidazol-1-yl]benzenesulfonamide;
4-[4-chloro-5-(6-chloro-3-pyridyl)imidazol-1-yl]benzenesulfonamide;
4-[5-(4-fluorophenyl)imidazol-1-yl]benzenesulfonamide;

5-(4-aminophenyl)-4-chloro-1-(4-methylsulfonylphenyl)imidazole;
5-(6-ethoxy-3-pyridyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-5-(4-dimethylaminophenyl)-1-(4-methylsulfonylphenyl)imidazole;
5-(3-chloro-4-dimethylaminophenyl)-1-(4-methylsulfonylphenyl)imidazole;
4-chloro-5-(3-chloro-4-dimethylaminophenyl)-1-(4-methylsulfonylphenyl)imidazole;
5-(4-acetylaminophenyl)-4-chloro-1-(4-methylsulfonylphenyl)imidazole;
5-(4-ethylsulfinylphenyl)-1-(4-methylsulfonylphenyl)imidazole;
5-(4-ethylsulfonylphenyl)-1-(4-methylsulfonylphenyl)imidazole;
~~or a salt, solvate or prodrug thereof; a salt thereof;~~
~~a solvate thereof; and~~
~~a prodrug thereof.~~

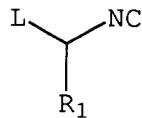
12. (Amended) A process for preparing a compound of formula I according to claim 1 which comprises:

(a) when in a compound of formula I R₁ represents hydrogen or methyl, reacting an imine of formula II



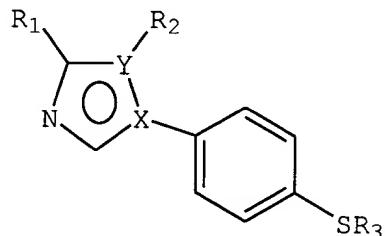
II

wherein X, Y, R₂ and R₃ are as defined in claim 1, with an isocyanide of formula III



wherein R₁ represents hydrogen or methyl and L represents a good leaving group; or

(b) when in a compound of formula I R₃ represents C₁₋₈ alkyl or C₁₋₈ haloalkyl, oxidizing a thioether of formula VIII,



wherein R₃ represents C₁₋₈ alkyl or C₁₋₈ haloalkyl and X, Y, R₁ and R₂ are as defined in claim 1, with a suitable an oxidizing agent; or

(c) when in a compound of formula I R₃ represents -NH₂, reacting a compound of formula IX

